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The CHEMIST

MARCH, 1937



VOLUME XIV, NO. 3

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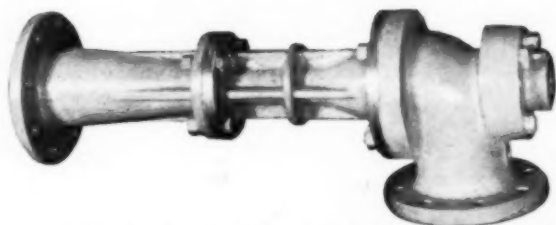
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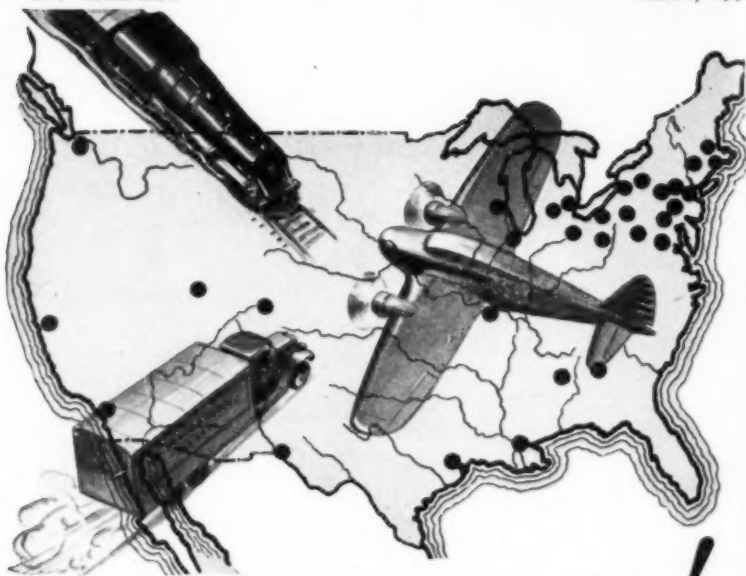
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The CHEMIST

Publication of

THE AMERICAN INSTITUTE OF CHEMISTS, INC.

V. F. KIMBALL, *Editor*, 233 Broadway, New York City

VOLUME XIV

MARCH, 1937

NUMBER 3

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THE AMERICAN INSTITUTE OF CHEMISTS

HOWARD S. NEIMAN, *Secretary*

233 Broadway
New York, N. Y.

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Objectives of the AMERICAN INSTITUTE of CHEMISTS

To give chemists professional solidarity.

To put the profession back of a definite code of ethics.

To insist on adequate training and experience qualifications.

To educate the public to an understanding of what a chemist is.

To protect the public and the profession by fighting quackery.

To raise the economic status of chemists.

HOWARD S. NEIMAN, *Secretary*
The American Institute of Chemists
233 Broadway, New York, N. Y.

Please send me an application blank for membership in the American Institute of Chemists.

Name

Position

Address

City State

EDITORIAL

A Message from Our President

THE AMERICAN INSTITUTE OF CHEMISTS, since I have become President, has made very rapid progress. I do not want anybody to get the idea that the great advancement of the INSTITUTE is due to my incumbency in office. It has been entirely due to the ardent work of my predecessors and the coöperation I have had from the officers and members of the council.

Since May 1936, we have increased our membership by 277 Fellows, which is a greater increase than has ever taken place before. We have put our house in order and before long will be on a firm financial footing. We have engaged a Certified Public Accountant who showed us what many of us knew—that it costs us over \$2.00 a year more to sustain a Fellow than the price he pays. At the May meeting, I will put it up to the entire membership whether the increase be to \$7.50 or \$10.00 per year.

The good that the INSTITUTE does is incalculable. My position has brought me unsolicited interviews with the President of the United States, and the Governor of the State of New York. There is a real need for the INSTITUTE OF CHEMISTS and only a few of our objectives are outlined here:

- To give chemists professional solidarity.
- To put the profession back of a definite code of ethics.
- To insist on adequate training and experience qualifications.
- To educate the public to an understanding of what a chemist is.
- To protect the public and the profession by fighting quackery.
- To raise the economic status of chemists.

I urge members of the INSTITUTE to bring in a new member for 1937, so that we may continue to do the good work which we have outlined. I hope in the next issue to have a definite report of my next interviews with the President of the United States, the Attorney General, the Postmaster General, and the Governor of the State of New York.

Marquillian Toeh

Reclassification of Municipal Chemists of the City of New York

The National Council of THE AMERICAN INSTITUTE OF CHEMISTS, at its meeting held on January 28, 1937, approved the adoption of the following reclassification of chemists in the municipal service of the City of New York as amended by the recommendations of its committee. This committee report follows the reclassification given below.

This reclassification was submitted to the Municipal Civil Service Commission by the Association of Municipal Chemists of the City of New York.

Proposed System of Classification and Grading for the Chemical Service of the City of New York

Grade 1

TITLE: *Laboratory Assistant (Chemical)*

DUTIES: To clean apparatus; to prepare reagents and samples; to perform elementary tests under supervision.

REQUIREMENTS: Graduation from a high school curriculum which includes successful completion of a course of at least one year in each of the following: chemistry, physics, algebra, geometry, except that high school students in their final high school year will be permitted to take the examination, provided that at the time of certification for appointment, they present proof of successful completion of their course.

SALARY RATES: Entrance salary \$1200; annual increments of \$120 up to maximum of \$2040 per annum.

To be filled by open competitive examination.

Grade 2

TITLE: *Junior Chemist*

DUTIES: Routine chemical analysis and physical testing, under supervision; sampling of materials; plant inspection; and such other work as is customarily required of the routine analyst.

REQUIREMENTS: The degree of B.S. in chemistry or its equivalent from an institution of recognized standing, except that students in their final year of a chemical course will be permitted to take the examination, provided that at the time of certification for appointment they present proof of successful completion of their course. Appointments from

this list to be made to all the laboratories in the service requiring Junior Chemists.

SALARY RATES: Entrance salary \$2160; annual increments of \$180 up to maximum of \$3060 per annum.

To be filled by open competitive or promotion examination.

Grade 3

TITLE: *Chemist*

DUTIES: To perform chemical analysis and physical tests, independently; to substantiate validity of findings; prepare evidence for use in court or other hearings; give expert testimony; to assist in research work or other chemical work requiring judgment and professional skill; to assist in supervision of the two lower grades.

REQUIREMENTS: The degree of B.S. in Chemistry or its equivalent; from an institution of recognized standing. In addition, six years of experience in the field of chemistry. Due credit to be given those who have obtained appropriate higher degrees and for experience within the given field which the position calls for.

SALARY RATES: Entrance salary \$3120; annual increments of \$240 up to maximum of \$4080 per annum.

To be filled by open competitive or promotion examination.

Grade 4

TITLE: *Senior Chemist*

DUTIES: Independent performance of research work; analysis and testing involving matters of special importance or requiring originality; consulting work; assistance in administration or supervision of laboratory division.

REQUIREMENTS: The degree of B.S. in chemistry or its equivalent from an institution of recognized standing. In addition, ten years of experience in the field of chemistry, two years of which must have been spent in responsible, executive, administrative assistant, research or consulting capacity. Due credit to be given those who have obtained appropriate higher degrees and for experience within the field which the position calls for.

SALARY RATES: Entrance salary \$4260; annual increments of \$300 up to a maximum of \$4860 per annum.

To be filled by promotion examination only.

Grade 5

TITLE: *Chief Chemist*

DUTIES: Executive supervision and responsible charge of a laboratory.

REQUIREMENTS: B.S. degree in chemistry or its equivalent, from an institution of recognized standing. In addition, fifteen years of experience in the field of chemistry, five years of which must have been spent in a responsible executive, research or consulting capacity. Due credit to be given those who have obtained appropriate higher degrees and for experience within the given field which the position calls for.

SALARY RATES: Minimum \$5000 per annum with such increments as may be authorized by the Board of Estimate and Apportionment.

To be filled by open competitive or promotion examination.

Recommendations:

For the good of the service and in the best interests of the City, the effectuation of the transition of the Chemical Service from an unclassified status to a classified service should not be allowed to impair the morale of the present personnel and it is therefore urged:

A. That any assignment to grade be on the *basis of qualifications and duties*. That wherever an employee does not receive the minimum salary of his assigned grade, the Commission recommend that it be increased to the minimum as soon as feasible.

B. That provision be made for promotion from grade to grade in all grades.

C. That no reduction in salaries or lowering of titles acquired through Civil Service examination by present incumbents be countenanced by the Commission.

D. That the Commission recommend to the Board of Estimate the establishment of regular periodic salary increases within grades, as soon as feasible.

E. Experience within any grade of such length of time as required for the next higher grade shall be deemed as in satisfactory compliance with the experience requirements in any examination for that next higher grade.

The report of the Committee appointed by the INSTITUTE to consider this reclassification is given on the following page.

Institute Committee Report

The following recommendations were made by the Committee appointed by the National Council to consider the above reclassification:

1. That the position of laboratory assistant be eliminated from the classification of chemists.
2. That the scheme of gradation, based on duties, requirements (qualifications), and salaries, as set forth in the classification, be endorsed.
3. That the establishment of annual increments as set forth in the classification be endorsed.
4. That the amount of credit allowed for graduate work be specifically stated in terms of years of experience.
5. That the grade of Junior Chemist be filled by competitive examination only; the grades Chemist and Senior Chemist by competitive or promotion examination, and the grade Chief Chemist by promotion examination only.
6. That any classification which may be finally adopted shall not apply to any man now in service, but only to those who are entering the service.



Educational Positions Wanted

Two members of the teaching profession, of several years' experience, desire a change. Both hold the degree of Ph.D. One has taught physical, inorganic, and organic; the other only organic. Both have publications to their credit and both have directed research. One is a Fellow of The American Institute of Chemists. Dissatisfaction with present locations is not a factor in the desire for a change on the part of either. Correspondence would be welcomed with any educational institution desiring to discuss the possibility of an opening. Address replies to Box 14, THE CHEMIST, 233 Broadway, New York, N. Y.



Civil Service Examination

Medical Technician (Tissue Culture), \$1,620 a Year.

National Institute of Health, U. S. Public Health
Service, Washington, D. C.

Applications must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than (a) March 16, 1937, if received from States other than those named in (b). (b) March 19, 1937, if

received from Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

DUTIES: Under general supervision, to conduct sterile technic for tissue culture medium; to make solutions for such medium; to assist in actual transfers in connection with tissue culture; to make and keep records of cytological work, and to perform related duties as required.

QUALIFICATIONS: Applicants must have been graduated from a standard high school, and have had as a minimum not less than three years of laboratory technician experience, one year of which must have been in the specific field of tissue culture. College graduates need have but one year of experience—in the field of tissue culture.

Application forms may be obtained from any first class post office, or from the U. S. Civil Service Commission, Washington, D. C., or from U. S. Civil Service District Offices.



Prefabricated Houses

The poor, who suffer in miserable city slums, will someday dwell in modern, sanitary, prefabricated houses. The chemists are building this new humanitarian world through their researches in steel sheeting, in the treatment of plastics, resins and lacquers. Harvey Wiley Corbett, New York architect, speaking on "The Prefabricated House," before a meeting of The American Institute of the City of New York, said: "The assembling cost of a house today is all of sixty per cent. In order to reduce the cost, the item of assembly will have to be eliminated. The mass production house will not be possible until its units can be manufactured complete in a factory. The first such house, after the enormous obstacles of the present inadequate research have been overcome, will cost up toward a million dollars, including the machinery for its manufacture, but after that, houses should be available for thirty per cent of their present cost. Only in this way will we attain the elimination of our slums."



Annual Meeting

The 1937 Annual Meeting of THE AMERICAN INSTITUTE OF CHEMISTS will be held in New York, N. Y., on May 15, 1937, with headquarters at The Chemists' Club, 52 East 41st Street.

Implied Chemistry

By DR. L. A. JORDAN

The professional problems of the chemist in England bear a close resemblance to those of the chemist in America, as shown by these excerpts from an article in *Chemistry and Industry* (London).

NORMALLY we hear so much about different kinds of chemistry—analytical chemistry, rubber chemistry, inorganic chemistry, and so on—that when I decided to speak about the less material aspects of the chemical profession some qualifying adjective seemed to be essential, something to cover the intangible things which even if not often acted upon and seldom expressed are nevertheless real.

There is ample evidence on all sides that employers of the present generation now recognize that human material is the most important raw material of industry and that chemistry enters into most forms of human activity. The lessons learned and the responses evoked bring inspiration to the lives of some individuals and these fortunate ones thus find the means to help others with their difficulties. We like to think that there may be young Faradays yet amongst us, but none may dream today that their work will be appreciated a hundred years hence; the tragedy is that many work without sufficient confidence that their work is wanted at all, so that in the end their purposeless activities become of no account. Some are fortunate and find satisfaction in the discovery of new knowledge and the creation of new things, and in that kind of opportunity chemistry excels. Many there are who hold lofty ideals of public duty—men of vision, tenacity of purpose and a determination to help others—but many are perplexed, cynical, and contemptuous, whose only philosophy is centered around the thought that the Almighty must be a humorist.

Some, the unhappy disappointed ones with a grouse against life, attempt to deny the truth of their own experience and unhappily linger over what might have been. There are some who having attained a sheltered position do nothing for their fellows or their profession except to criticize and to jibe. And so passing, at it were, our chemist brethren under review the questions remain: What have we gained and what have we given? What have we done and what might we have done? Sooner or later, each man amongst us must answer these questions for himself, and when St. Peter concludes his cross-examination

and says, "So, that is what chemists are like!" shall we reply, "Yes, that is what chemists are like" in a tone suggesting confidence in work well done, or shall we have to admit that many men, far too many, who rank as chemists are so insular, narrow, and parochial in outlook as to be incapable of even recognizing, let alone looking after, their professional interests, and as to the wider life of the community they leave that to the other fellow? Enthusiasts at different times have made attempts to see that the chemist becomes an active member of society, but however forlorn this hope may be there is certainly more need of it today than ever.

What is a Chemist?

I admit that there are difficulties—what does the man-in-the-street know of chemists and chemistry, and what does the judgment of the uninstructed person depend upon? My children complain bitterly of having to explain to their small friends that they do not live at a drug store, and they have quite despaired of explaining how I earn a living. They have said to me even, "Why aren't you something that people can understand?" I have thus been reminded of our professional handicap, but do not forget that the child-mind, to which these things are important, is a reflection of the mind of the community; children prefer action to talk and explanations.

This last month there was held in London the 45th Chemists' Exhibition, opened by the President of the Pharmaceutical Society, organized by British and Colonial Druggists, Ltd. What do you make of that? The Press had an article "Art of the Chemist" which caught my eye. It was mainly concerned with medicated sweets! . . .

In no other country in the world is there any confusion between chemists and pharmacists; in this country, not only is the qualification of the pharmacist given by the Pharmaceutical Society but these gentlemen can also call themselves apothecaries and druggists; contrariwise they prefer to use the title "chemist" which according to the law they are fully entitled to do. . . .

So recently as 1908, a Poisons and Pharmacy Act was passed which conferred the right on trading companies to use the word "chemist" provided a qualified "pharmacist" was in charge. To most people that sounds rather comical; but it is really very tragic, and why? One reason is that a pharmacist is a pharmacist because he is vetted and qualified by the Pharmaceutical Society, which can and does speak for all pharmacists.

Who Speaks for Chemists?

But who speaks for chemists? The Chemical Society, the Institute of Chemistry, the Society of Chemical Industry, the British Association of Chemists, to say nothing of a multitude of specialist societies catering for specialized groups—the Dyers and Colourists, the Oil and Colour Chemists, the Rubber Technologists, the Chemical Engineers, and the rest? No one knows. We are beaten on organization, and our professional epitaph should read, "Here lies chemistry—she died of a surfeit of adjectives."

The Pharmacy and Poisons Act—An Example

Now for the sequel. In 1933 another Pharmacy and Poisons Act was passed. Following the new style of legislation, this Act was passed without the details being filled in—these were to be supplied by the Minister on the advice of the Poisons Board. A year ago, the now famous "Report of the Poisons Board" was published, which shows exactly how little the official mind knows about the chemical industry and its ramifications. Technical advice, such as was available by the constitution of the Poisons Board, was dominantly pharmaceutical and medical in character. . . .

The Poison Regulations would have gravely handicapped many industries, by imposing restrictions on chemical manufacture with an entire disregard for the reality of the situation; also, some curious situations would have arisen. Amendments have now been made, but many speeches during the last year or so have been enlivened by recounting the ludicrous possibilities which might be read into the report.

. . . The most serious aspect, however, was concerned with personnel; the only persons qualified to supervise any manufacturing operation involving the production or use of a poison (mighty little of what we commonly understand by the chemical industry, as well as a large number of other industries not normally regarded as chemical industries, would have escaped this classification), subject to some special provision to cover the case of people who have been fulfilling such duties for three years, would have been qualified pharmacists, medical practitioners, and members of the Institute of Chemistry.

This would not have been so bad if all qualified chemists (using the word "qualified" as meaning "to know one's job") were members of the Institute of Chemistry but they are not. . . . It is most important that all chemists should be members of one and the same thing. . . .

However, what is the outcome of the Poisons Report? By prodigious efforts on the part of the Chemical Industry working through the focus of the Association of British Chemical Manufacturers, supported by numerous other trade organizations, the worst features of the Report have been or are about to be corrected. But at what a cost! Thousands and thousands of pounds' value of time alone on the part of men, who might reasonably claim that this trouble could have been to some extent avoided, if chemists were doing their job. Yet I venture to suggest that there are hundreds of chemists whose livelihood has been placed in jeopardy by the activities of this Poisons Board, who, even today, are either ignorant of the true position, or if not ignorant, have not bestirred themselves in the slightest to correct it. So long as this kind of thing can go on, we are beaten at the starting post.

The issue of the Poisons Report in the early summer of last year caused the various societies to bestir themselves a little; the British Association of Chemists and I think others have pointed out that the Fellows of the Institute of Chemistry are not the only pebbles on the beach, and a certain amount of writing has been done, notably in the *Journal of the British Association of Chemists*, pointing out the dangers of this kind of legislation and the importance of securing a united front, particularly by registration.

So far, so good, but I have an uneasy feeling that this present disturbance will evaporate with the arguments still proceeding hotly and ineffectively as to who shall do the registration. . . . In fact, nothing short of a fascist revolution in the conduct of our chemical societies would appear to be adequate. . . . The important lesson to be learned is the need for organization, first, last, and all the time.

The Chemist and the Community

So much for internal organization, but what of our relationship to the outside world. The "chemist and the community" embraces a very wide field of study, particularly so in these days when political issues seem to paralyze the old simple ideas of duty and service. . . .

There is no doubt at all that whilst chemistry is the keystone of the age of science in which we are living and is very much in the public mind today, the public mind is so alarmed that its attitude to chemistry is apt to be censorious. To many of the half-educated public, chemistry means little more than a medley of pharmacy, medicated sweets, toilet preparations, and poison gas, and the benefits which chemical science

has conferred on humanity are unheeded. What can be expected when the phrase, "all the resources of modern science," is so commonly met with in reference to present methods of warfare. I quite agree that the situation is due as much to the chemist as to the public. The public is admittedly a problem but we can at least scourge ourselves for indifference, weakness, and failure to provide the public with a constructive outlook.

Of recent years it would seem that Heaven, Hell, and Posterity have all lost their reputations and the world has become a very contrary place. The temper of the present time is confused, restless, and skeptical. Apart from the war complex, the cry is all for speed, cheapness, and utility to the point of vulgarity. Craftsmanship declines and the machine triumphs. We are indeed a nation of shopkeepers, but with little knowledge and interest in our wares. The material conditions of the age are inimical to the simple living, settled ideas, and confident singleness of purpose which we like to think characterized the time before radio and motor cars.

Today the gap between production and consumption grows wider, and chemists have been accused of being responsible for unemployment and the depression on the ground that it is the inventions of chemists and engineers that have removed the need for labour. Quite a number of economists have said little pieces on this subject, but as these observations usually have a political background it is very difficult to appreciate the truth of the matter of which they speak. The tide of scientific activity has mounted steadily for years and never at a greater rate than today, and whilst civilization, as we understand it, continues it cannot ebb. I rather suspect that our main trouble has arisen through the fact that this rate of growth has been too much for mankind, human nature being what it is. The plethora of invention has outstripped the capacity of financiers to keep control on the old terms; the result we see in over-production on the one hand and the displacement of labor by machine on the other. The machine is condemned instead of the selfish and unsocial uses made of its power. The greatness of scientific discovery and mechanical ingenuity is overlooked because of sympathy for the working classes whose part in securing industrial success and profits so often savors of exploitation.

I am not advancing any excuses or any remedy; I am merely asking you as chemists to think about these things and to recognize the fact that the public estimation of our science and our worth is a matter for

which all of us must answer. Indifference on the part of the individual helps no one, and it certainly does not help his own individual security.

As individuals, we have much to be thankful for. We are living through the greatest period of scientific endeavor—almost a revolution—and no matter how modest and humdrum the work of the individual chemist may be in factory or school, nevertheless, no other profession or calling provides the same degree of active interest; the artist, the musician, the poet are all equally constructive but they enjoy a more reflective interest. Today the fundamental laws of physics and chemistry have been laid down; we do not know anything much about the nucleus of the atom but the broad outlines of the more material aspects of chemical science are fairly well established. If things seem to have gone wrong in the application of this knowledge, it is still science and mainly chemical science which upholds the fabric of our present day civilization. . . .

The Chemist and the Politician

Nearly a year ago, Mr. Ramsay MacDonald opened the new coal/oil works of Imperial Chemical Industries, Billingham. It is a magnificent job, working almost to flow sheet, and a triumph for the chemical engineers. In his speech, Mr. MacDonald described the sequence of events in the development of the process, the steady, tireless and efficient progress and study from the germ idea through careful experiment to appreciation of its practicability, and the inspiration of the bigness of the issue; finally he said, "I have seen these processes at work and I have for my amusement wondered whether they have not advice of great wisdom to give us politicians." They certainly have. During the last year or so, as Lord President of the Council, he has touched frequently upon scientific matters, and in May last at the Paint Research Station, he admitted that his first love was science and that to science he might return; many wise men before him, he said, had gone back to where they started, but if he would propound and develop the policy that all who direct public affairs of any kind whatsoever should have some knowledge of science and scientific method, I submit that he would have done something really great.

The Chemists' Responsibility

The impact on life of things chemical is today an inspiring as well as a material item of no small dimensions. Every living person is conscious of change—change in the manner and method of living, in the supply and variety of foods and clothing, in fact, change in all the

elemental activities of mankind. Some of this change is too much for human nature; otherwise we should not hear of crops being burned in the very year for which Sir William Crookes prophesied a world shortage. Neither should we hear of and see so much effort devoted to war purposes. It has been repeatedly said that the ferment agitating the world is due to the incapacity of human nature to adjust itself to the rush of scientific invention and to assimilate what is good and to reject the bad. How much is this the fault of the devotees of science? We cannot escape responsibility. The age of science has brought and is still bringing material changes; also, it is bringing, as it ought, changes in the practical conduct of life and maybe in time it will show us how to set the moral ideal in a framework of natural philosophy.

In any event, to chemists is given the center of the line; on them in no small measure depends the future of our nation so long as its life depends upon industrial supremacy in a competitive world. The future of chemists and their part in the life of the community depends on the qualifications they bring to this task. Too many chemists today stop with their accomplishment of doing some positive material thing which is their everyday work. Too many have no interest outside the daily task; they are introspective, detached, atrophied, taking no part in education or in the social life and welfare of the community. At the best, they are but tradesmen. For them, sooner or later, life loses its honesty of purpose, the ability to think accurately diminishes, and in the end the capacity to do the ordinary specialized task falls off. The employer notices the change and the community unconsciously appraises the conduct of the individual. . . .

The Chemist Before the Public

I fear that the general public has little or no precise appreciation of things chemical, even when such things intimately affect everyday life, but they are not slow to appreciate right personality. The Press, who should instruct, signally fail to do so because so much of newspaper writing is below the intelligence of the readers; unless some item can be called "news" and given a dramatic quality not much below that of a murder trial, there is little chance of scientific work getting more than perfunctory notice.

Sir Richard has pointed out recently that science needs not only writers to make its achievements intelligible, but also poetic and other interpreters who will expound its intent and influence by artistic representation or performance. Sir Richard has developed this theme in a

very beautiful manner in an address entitled "Interpretation of Science." As he points out, quite a number of the poets since Wordsworth have strayed into the scientists' domain and played a part in understanding and appreciating the processes of nature. William Watson expressed the essential unity of Science and Art in the following verse:

"Science and Art, compeers in glory
Boast each a haunt divine;
My place is in God's laboratory
And in his garden, mine."

Sir Richard is right. Science needs its psalmist.

However, I digress—I was asking where the chemist stands today in public estimation? What face do we present to the everyday world? Probably our world sees us as quite ordinary men working in the ordinary way even if there is something a little mysterious and queer about it at times. To our intimates some appear to be reasonably prosperous and some underpaid even for the work they do; some complain of being exploited and misunderstood; some are indifferent and quite a few pass by on the other side. But to ourselves as a profession, we show ourselves to be a heterogenous medley of factions which may be likened to the Balkan States (pre-1914 grade) of the scientific world.

The mania for specialization is leading to the creation of armies of adjectival chemists who steadily and consistently by their actions deny the mother who gave them birth, whose name is just Chemistry, plain unqualified Chemistry. A man who would be true to his calling must recognize that he is first and foremost a chemist and an oil chemist or a rubber chemist as the case may be afterwards. His conduct and his subscriptions must be regulated accordingly not only as a matter of principle and honour but as a matter of common sense and simple insurance of his professional standing.

The Chemist Called Peter

The way of the chemist in industry is hard. If, however, he can learn to deal successfully with the human material of industry, which may be described as graduating in applied psychology, then he begins to make progress. Unfortunately, when that happens he usually begins to hide the fact that he ever was a chemist, and becomes an administrator or a plain business man. In this respect, Peter has his modern counterparts. How many men with chemical knowledge have attained high

rank in the Civil Service (apart from the purely technical divisions), and do they allow it to be generally known that they possess chemical knowledge?

Understand Human Nature

Where do chemists go wrong, and what is the difference between one who is successful and one who is not? A particular kind of manual dexterity and imagination can make a man a capable experimentalist, and if he has the ability to work out a few tricks he can soon make a name for himself. In his case, tricks bring prestige—no tricks, and he might spend his life in obscurity. Others may have a marked literary gift or the ability to talk, but the fortunate one is he who with a sound chemical background has the capacity to understand human nature.

A few months ago, I was called upon to speak to a company of which the majority were mining engineers, at any rate they were not chemists. It was suggested that I should reply to the question: "Tell us how you earn your living!" I replied: "If you must know, I am primarily a chemist with an industrial leaning, which being translated means that through a variety of vicissitudes in a number of different fields of activity I have learned to do in a reasonably ungrudging manner all those things which the other professions from engineers to managing directors cannot or will not do." Naturally, this reply was received with laughter, but it covers many of the implications of a chemist's job. Moreover, there is an extraordinary subtlety about chemistry which is not easily understood by other than chemical minds (and here a chemical mind need not carry a chemical degree), a circumstance that provides both the entrancing pleasure of chemical philosophy and the great peril of chemical practice. I can illustrate what I mean by the following: An engineer is required to span a certain gap between two walls. If he is a good engineer he will know to what books and tables to refer in order to find the section of steel required for the duty. Then, provided the walls are equal to the crushing strain of the load, he knows that the structure will stay "put."

Now take witness of the poor chemist—he puts things in his pots and pans, turns on the steam and hopes for the best. What really happens—who shall say?

The managing director says: "My engineers are fine fellows. I can understand them—simple straightforward souls who know what they want to do and do it. But those chemists—with the exception of so-

and-so, they are quite impossible—they don't seem to know what they are doing half their time!"

But what of "so-and-so" above mentioned? He is obviously on the way to being successful—wherein lies his secret? I fear that in industrial practice successful chemists are made and measured by their power of anticipating events, and not only to the extent of having ready adequate and convincing explanations of why something has or has not happened as the case may be.

That way of expressing the matter is perhaps facetious, but it does express that the successful man has acquired a background of knowledge and experience which gives him a sense of proportion and a right perspective—and out of all these things together, judgment is born. It is useless to bewail the lack of this capacity when it does not exist or when it has become atrophied by long and persistent concentration on detail. Nevertheless, as I see things, therein lies the greatest weakness of the chemist today and the chief obstacle to his taking his proper place in control of industrial development and in public life generally. The curse of the chemist has always been his narrow outlook—we are too fond of labels as I have said before, and that brings me back to organization.

The Chemical Council

There is no need to review the many societies and associations having connections with chemistry, or the relationship between one and another—I will only refer to the last one—the Chemical Council which has been formed as a mild form of co-operation between The Chemical Society, the Society of Chemical Industry, and The Institute of Chemistry.

The first business of this Chemical Council has been to provide for the maintenance of the Chemical Library which, though still remaining the property of the Chemical Society, is to be taken as a joint responsibility for upkeep and expansion. Their next work will probably be concerned with the coordination of publications, and it is hoped gradually to effect economies in administration and the cost of publications. This may lead to other useful work, and finally, the Chemical Council will speak authoritatively for all chemical opinion after consultation with its associated bodies.

The coming of the Chemical Council is the last, if belated, effort to discover the secret of unity. It has come quietly and modestly in the world of chemistry in which the idea of coöperation, though much in

mind of recent years, has not made such progress. Perhaps the slow progress has been due to fear—fear of the little fish being swallowed up or absorbed by the big fish. We have to show that these fears are unfounded because, at the worst, the degree of union contemplated and hoped for can only be in the nature of federation—adhesion or adsorption to a common principle and a common anchorage. There is a great difference between adsorption and absorption. Every society must seek to promote the dignity and standing of the profession of chemistry by bringing its members to accept a high code of honour, a strict test as to qualifications, and the principle that as chemists we are all one family—all supporting things and institutions for the good of the cause and not for what the individual may get out of it.

"Plough no Lonely Furrow"

I believe there is a new spirit developing and that, given reasonable luck, the new Chemical Council will succeed. Professor Thorpe's message to the Institute of Chemistry was particularly striking. He said, "I have noticed a certain tendency among some members of the Institute to regard the policy entailing a more or less splendid isolation as being the one best to pursue. I do not believe it. The Institute has its place in the chemical hierarchy and a great and important future will be assured to it, if it follows the path of close cooperation with the other chemical bodies. If, on the other hand, the policy of 'ploughing the lonely furrow' prevails, it can but lead, in my opinion, to disaster and oblivion."

I commend those sentences to a much wider circle. I close with the thought that all our different outlooks, whatever our interests and sympathies, can be composed, if we adhere to the ideal of chemistry first, qualified chemistry second, and no lonely furrows.

The world of chemistry awaits its Messiah! Whence will he come? Shall we fail to hear him for the noise of our discords? I hope not.



Editor's Note: Interesting British editorial comment on the above article and on the Chemical Council will be found on pages 87 and 88 of this issue of THE CHEMIST.



COUNCIL OFFICERS

President, MAXIMILIAN TOCH
Vice-President, ROBERT J. MOORE

Secretary, HOWARD S. NEIMAN
Treasurer, BURKE H. KNIGHT

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ALLEN ROGERS
NORMAN A. SHEPARD
WALTER T. TAGGART
FREDERICK W. ZONS

CHAPTER REPRESENTATIVES

<i>New York</i>	<i>Niagara</i>	<i>Philadelphia</i>	<i>Washington</i>
LLOYD VAN DOREN	ARTHUR W. BURWELL	C. W. RIVISE	LOUIS N. MARKWOOD

January Meeting

The one-hundred and thirty-eighth meeting of the Council of THE AMERICAN INSTITUTE OF CHEMISTS was held at The Chemists' Club, 52 East 41st Street, New York, N. Y., on January 28, 1937, at 6:00 o'clock P. M.

President Maximilian Toch presided.

The following officers and councilors were present: Messrs. F. G. Breyer, M. L. Crossley, B. H. Knight, R. J. Moore, H. S. Neiman, W. T. Read, A. Rogers, N. A. Shepard, M. Toch, L. Van Doren and F. W. Zons. Miss V. F. Kimball was also present.

The minutes of the previous meeting were approved. The Treasurer's report, showing cash on hand of \$1421.06, was read and accepted.

Dr. Toch reported that he had had an interview with Governor Lehman and Dr. Frank Pierrepont Graves, State

Commissioner of Education, concerning the licensing of chemists. It was feared that the pharmacists, who have a strong political organization, would probably oppose this move, since they call themselves "chemists". Dr. Toch stated that it was his personal opinion that there would be no objection to calling a pharmacist a "chemist", if he had an adequate chemical education.

The Secretary reported that the membership of the INSTITUTE, not including those to be elected at this meeting, is 1100.

The Secretary again presented the report of the Committee appointed to consider the reclassification of chemists in the Municipal Service.

Upon motion made and seconded, the recommendations made by the Committee were endorsed by the Council.

Upon motion made and seconded, it

was decided to hold the Annual Meeting in New York City.

The following committee was appointed to decide upon the headquarters for the Annual Meeting and upon the exact date of the meeting: Robert J. Moore, Chairman, H. S. Neiman, B. H. Knight, Raymond E. Kirk, and J. W. H. Randall.

The date of the next Council meeting was tentatively set for February 18th.

Upon motion made and seconded, the appointment of Mr. Breyer, as the official representative of THE AMERICAN INSTITUTE OF CHEMISTS to the Committee on Unemployment and Relief for Chemists, was confirmed.

Upon motion made and seconded, the following new members were elected:

FELLOWS

ANDRE E. BRIOD, *Assistant to Technical Director*, National Oil Products Company, Harrison, N. J.

PAUL DEM. BUCKMINSTER, *General Superintendent*, General Paint Corporation, San Francisco, Calif.

LAUCHLIN MACL. CURRIE, *Director*, New Products Division, National Carbon Company, Inc., Cleveland, Ohio.

WAYNE R. FULLER, *Manager of Industrial Research*, Devoc & Raynolds Company, Inc., Louisville, Ky.

HENRY I. GILBERT, *Vice-President and General Manager*, Capitol Paint and Varnish Works, Inc., Brooklyn, N. Y.

HAL R. HARLAN, *Technical Director*, Hal R. Harlan Associates, San Francisco, Calif.

HARRY A. HOFFMAN, *Chemist-Research*, Bakelite Corporation, Bloomfield, N. J.

HENRY HOMER NELSON, *Technical Service*, Sherwin-Williams Company, Newark, N. J.

DONALD PRICE, *Research Chemist*, National Oil Products Company, Harrison, N. J.

F. GRANT VON M. SCHLEICHER, *Chemist, Vice-President, Director*, W. D. Wilson Printing Ink Company, Long Island City, N. Y.

CARROL R. SUTTON, *Sales Development Department*, Commercial Solvents Corporation, Terre Haute, Indiana.

ROBERT I. WISHNICK, *President*, Wishnick-Tumpeer, Inc., New York, New York.

ASSOCIATE

SOLOMON D. SCHNEIDER, *Laboratory Assistant*, Bureau of Sewers and Highways, Municipal Building, New York, N. Y.

JUNIOR

WILLIAM P. LAWLER, *Analytical Chemist*, Nichol Copper Company, Masspeth, L. I., N. Y.

Upon motion made and seconded, Kenneth J. Howe was raised to Fellow.

Upon motion made and seconded, the President was requested to select a group of representative men in each industry to solicit membership from that industry.

There being no further business, adjournment was taken.



The next meeting of the National Council will be held on March 18, 1937.



Every member of the INSTITUTE is urged to bring in a new member by May 15th, the date of our Annual Meeting.

CHAPTERS

New York

Chairman, Raymond E. Kirk

Vice-chairman, D. D. Berolzheimer

Secretary-treasurer, James W. H. Randall

52 East 41st Street

New York, N. Y.

Council Representative, Lloyd Van Doren

The New York Chapter met at The Chemists' Club, New York, N. Y., on February 26, 1937, with Dr. R. E. Kirk presiding. An enthusiastic audience heard Lieutenant William J. McMahon, in command of the Technical Research Laboratory of the Police Department

of the City of New York, address the members on the subject of "The Chemist in Crime Detection." He was accompanied by Chemist Edward J. Kelley, also of the Technical Re-

Niagara

Chairman, Groves H. Cartledge

Vice-chairman, Howard W. Post

Secretary-treasurer, William R. Sheridan

1439 Kenmore Avenue

Kenmore, New York

News Reporter to THE CHEMIST, William A. Smith

Council Representative, Arthur W. Burwell

Pennsylvania

Chairman, Joseph W. E. Harrison

Vice-chairman, Lewis D. Newitt

Secretary-treasurer, Avenir Proskouriakoff

67 Fairview Avenue

Lansdowne, Penna.

Council Representative, Charles W. Rivise

Washington

Honorary President, Charles E. Munroe

President, Louis N. Markwood

Vice-President, Norris W. Matthews

Treasurer, James B. Martin

Secretary, Ralph B. Deemer

213 Maple Avenue, Takoma Park, Maryland.

News Reporter to THE CHEMIST, James F. Couch

Council Representative, Louis N. Markwood

The December meeting was held at a luncheon in the Department of Agriculture building on the sixteenth. Mr. E. P. Coffee, chief of the Technical

Laboratory of the Federal Bureau of Investigations, Department of Justice, addressed the group outlining the character of the laboratory investiga-

tions utilized in the solution of crime. Mr. Coffee stressed the great need for specially trained men in this type of activity and the very important service which they can render to the police agencies in the detection and apprehending of criminals. This work is of especial interest to chemists whose training makes them valuable in the

many chemical aspects of crime detection. The meeting was well attended.

The February meeting held at the Cosmos Club on the fourth was devoted entirely to a discussion of business matters of interest to the group, including plans for future meetings and luncheons.

NEWS

Maximilian Toch, President of THE AMERICAN INSTITUTE OF CHEMISTS, spoke on the subject, "Advance in Photography" before the Miniature Camera Club of New York, February 8, 1937. Dr. Toch is internationally recognized both for his knowledge of the chemistry of photography and for his artistic photographs.



Hans T. Clarke, F.A.I.C., introduced the symposium on "Protein Chemistry" at the joint meeting of the American Chemical Society's New York Section and the Society of Chemical Industry, held on February fifth. The principal address was given by Professor Edwin J. Cohn of Harvard Medical School.



Charles N. Frey, F.A.I.C., director of the Fleischmann Laboratories of Standard Brands, Inc., and E. R. Weidlein, F.A.I.C., director of The Mellon Institute of Industrial Research, were re-elected to membership on the Board of Trustees of The American Institute of the City of New York.

Ross A. Baker, F.A.I.C., spoke on "Modern Trends in College and University Chemical Education", before a meeting of The Chemistry Teachers' Club, New York, N. Y., on February 19, 1937.



Alfred R. Macormac, A.A.I.C., recently received the Ph.D. degree from the University of North Carolina, for his work on the "Whole Cotton Project." He is now associate professor of textile chemistry at Alabama Polytechnic Institute, Auburn, Alabama.



M. L. Crossley, F.A.I.C., and C. C. Furnas spoke at the General Meeting, March third, of The American Institute of the City of New York on "What are Science and Technology Doing to Us?"



Harden F. Taylor, F.A.I.C., president of the Atlantic Coast Fisheries, was recently elected a member of the Board of Trustees of The American Institute of the City of New York.

Charles H. Herty, F.A.I.C., and the Chemical Foundation are seeing their plans materialize for a great newsprint industry in the South. Texas industrialists and bankers will build a \$5,000,000 newsprint mill at a location in East Texas which is now being determined by engineers. The management of the enterprise and the organization of technical staff personnel will be in charge of Perkins-Goodwin Company of New York. The mill is to have an initial capacity of one hundred and fifty tons of newsprint daily. Dr. Herty began his experimentations with Southern pine some twenty years ago, and developed a process which makes it readily convertible into newsprint.



The Catalyzer, published by the Department of Chemistry of the University of Notre Dame, has dedicated its February, 1937, number as a memorial edition to the Reverend Julius Arthur Nieuwland, C.S.C. Father Nieuwland was born February 14, 1878, and died June 11, 1936. He had joined THE AMERICAN INSTITUTE OF CHEMISTS as a Fellow in May, 1936.

William Stansfield Calcott, F.A.I.C., director of the Jackson Laboratories of E. I. du Pont de Nemours and Company, spoke on "Father Nieuwland, the Chemist", at the Memorial Exercises held January 10, 1937, at Notre Dame University. Dr. Calcott's talk appears with others in the memorial edition of *The Catalyzer*.



Joseph F. X. Harold, F.A.I.C., recently spoke on "The Chemist in Court" before a meeting of the New York Professional Group of Alpha Chi Sigma.

Hugo Zahnd, F.A.I.C., recently was promoted to the rank of Assistant Professor at Brooklyn College, Brooklyn, N. Y.



Nicholas Balyozian, F.A.I.C., formerly with John D. Lewis, Inc., Mansfield, Mass., is now with the Hub Research Associates, 292 Main Street, Cambridge, Mass.



Alsop Engineering Corporation extends a cordial invitation to chemists to drop in and visit their new Connecticut Plant at Milldale, Connecticut, which occupies ten and a half acres of property. With waterpower, modern machinery, and a skilled factory staff, they are now ideally equipped to continue the manufacture of their line of liquid processing equipment.



Drs. Colin Whittaker, F.A.I.C., and C. O. Lundstrom, F.A.I.C., are co-authors of two papers recently published: *The System Magnesium Sulfate-urea-water at 30°*, J. Am. Chem. Soc. 58:1975, 1936, and *Effect of Ammoniation on Urea Component of Superphosphate Mixtures*, Ind. Eng. Chem. 29:1, 61-68, 1937.



Dr. James H. Hibben, F.A.I.C., delivered the retiring president's address, "Chemical Applications of the Raman effect", before the Chemical Society of Washington, D. C. on January 14, 1937. Dr. Hibben, a recognized authority on the Raman effect, explained the energy shifts in the Raman spectrum due to substitution, homology, isology, and other intricacies of organic structure, to a capacity audience which overflowed the auditorium of the Cosmos Club.

CHEMISTS ABROAD

By James N. Taylor, F.A.I.C.

MORE than usual attention has been given in chemical circles to Dr. L. A. Jordan's recent lecture on "Implied Chemistry" to the Glasgow Sections of the Society of Chemical Industry and the Institute of Chemistry, and the Scottish Section of the Oil and Colour Chemists' Association. In a lengthy paper he dwelt in Biblical phraseology upon the shortcomings of the chemist, "whose curse has always been his narrow outlook." And he found in them the cause for the general neglect which the chemist suffers at the hands of the public, as instanced by references in the daily press and in the provisions of the Pharmacy and Poisons Act, 1933. "The way of the chemist in industry is hard;" if successful, he turns into a Peter denying his training; if unsuccessful, he is a Joseph unknown to the ruling Pharaoh. Dr. Jordan claims that "chemistry awaits its Messiah!" and seems to expect him in the Joint Chemical Council. The voice crying from Teddington, this reed shaken by the wind of public neglect, must not complain if some unloose their shoes in that direction and others display an Old Testament preference for Abana or Pharpar, instead of sitting down and weeping by the Thames.—*The Industrial Chemist*, (London).

THE CHEMICAL COUNCIL, which was formed under a Deed of Agreement between the Chemical Society, the Institute of Chemistry and the Society of Chemical Industry on July 1, 1935, for a period of seven

years for the administration of a fund for the promotion of research, publication, etc., and the provision and equipment of a suitable building or buildings, has now issued its first annual report dated December 2, 1936. The Council consists of twelve members, three each being nominated by the bodies referred to above and three as representatives of industry on the nomination of the A.B.C.M.—*Chemical Trade Journal*, (London).

PRIDE OF PLACE amongst the events which have seen the old year out must, for its importance, be given to the first report of the Chemical Council, states *Canadian Chemistry and Metallurgy* (Toronto), in its department, "News from Great Britain".

This body, it will be remembered, was formed in 1935, and it rests on the three supports of the Chemical Society, the Society of Chemical Industry, and the Institute of Chemistry. It is of no small significance to see these three bodies working, apparently, amicably together for the good of chemists and of chemistry.

The Council aims to coordinate the work of the three bodies, in effecting economies in administration and publications, in "furthering the science of chemistry in the public good", and in extending the publication of new knowledge. The critics, if there are any, might be disposed to cavil at the "public good". The public show little enough readiness to finance the work of chemistry for their own good, at

any rate in Great Britain, and it is significant that the first job of the Council is to raise funds to carry out its worthy purpose. The "public good" might, too, have caused a little heart-burning a generation or two ago. The pure chemists would have had it that if the science of chemistry was to be furthered, it should be furthered in the cause of chemistry, pure and simple. But few such "pure" chemists remain. They are now called pedantic instead!

Economics are to be effected, it is understood from the report, in the publications of the constituent bodies of the Council. That will do a certain amount of good. But if it removes some minor evils, it will not begin to touch the big ones. Probably what the ordinary chemist would say was needed most would be the bringing together of the host of trade and semi-technical publications, the many specialist and semi-specialist ephemeral weeklies and monthlies, into the publication of a few really good and interesting journals.

CHEMICAL REPORTING was the topic of Mr. H. W. Cremer, director of chemical engineering studies at King's College, London, who spoke at a recent meeting of the Liverpool Section of the Society of Chemical Industry. Commenting, Mr. E. T. Williams, of Lever Bros. Ltd., said that the good reporter must have the ability to express himself lucidly. That was not a general gift—it could only come after years of experience. Another quality which the reporter had to have was the sense of direction. In reporting he must know where he is going. If one intended to travel to Manchester it was ridiculous to go to London and

then to start back. There was a tendency sometimes to crowd too much into reports. Often there were individuals who could not prepare a report without manuscript and who detailed failures and experiences without making the conclusion quite clear. His experience in the preparation of reports had not been entirely painless, and no doubt was akin to that of many others who had seen their manuscripts mutilated.—*Oil and Colour Trades Journal (London)*.

REVERTING to the question of reporting, says our eminent colleague, INDICATOR, some speakers at scientific meetings are like the mayor who once complained of the reports in the local paper. After he had spoken for about an hour he saw only a few lines in the local newspaper. At the next Council meeting, he complained bitterly, and told the reporter that if he didn't do better next time and put in all he said he had better keep out!

In the next issue there was a very long report, and it began with something like this: "Gentlemen, I now rise er-er to tell you that this here subject, ahem, ahem, has been before us before, and what I says is this—" Then followed a lot more "ers" and "ahems," with repetitions galore. The mayor never complained again.

SIR HARRY McGOWAN, chairman of directors of Imperial Chemical Industries Ltd., London, arrived in Australia on a business visit on January 9.—*Chemical Engineering and Mining Review (Sydney)*.

*"The time has come," the Walrus said,
"To talk of many things:
Of shoes—and ships—and sealing wax—
Of cabbages—and kings—"*



An Alcoholic Ballad

I know two little sisters,
I think you know them, too;
One puts you high in heaven,
And the other in Bellevue.

So spiritual is Ethyl,
She's thoughtful of her folks;
To kill them outright, she believes
The ghastliest of jokes.

'Tis sweet to fling with Ethyl,
Who stimulates the brain—
And you can wake and feel as good
As dear old Doctor Crane!

But O! that horrid Methyl,
Her quite attractive twin;
You never know what cot or ward
That girl will put you in!

While outwardly, she's charming,
And all that sort of thing,
It's inwardly she gets you—
Hark how the angels sing!

She loves to see a fellow
Completely lose his mind.
Or, better still, his eyesight,
But pouf—you know her kind!

L'Envoi:

O you may stroll with Methyl,
And let her pick your hearse,
But I will woo sweet Ethyl,
She's plain—but there are worse.

—*The Chicago Tribune.*

Resurrection in Terms of Chemistry

Henry Alfred Wadworth, of Hereford, who died in August last, aged 77 years, left a remarkable expression of belief on the Resurrection of the Dead in his will, which was as follows:

"At death my body shall be placed in the cheapest decent receptacle and taken in my own trailer and car to the most convenient crematorium and cremated. . . .

"I believe (and some of the leading scientific men of the day assure me that I believe rightly) that at my death the organic constituents of my body will be quickly converted into carbonic acid and ammonia, and that these gases will by the law of diffusion be at once distributed over the whole world, and will help to build other plants, and in their turn animals, so that in the future every plant and animal in the world will contain an infinitesimal portion of my body.

"The inorganic parts of my body, the phosphates of lime, etc., will also be dissolved, and by the agency of rains, rivers, and ocean currents will also be distributed, but more slowly. The energy left in my body at death, degraded to heat, will quickly leave it and form part of the energy of the universe. This I believe to be true

Resurrection of the Dead and the Life Everlasting.

"I believe in God, but, like the GOD of St. Paul's Greeks, it is an unknown GOD, as in our present state of development we are incapable of understanding Him, His Origin, and some of His laws."

—*Chemical News.*



There once was a chemist named Mugg,
Whose friends all declared him a bug,
Until one fine day,
In his Ehrlich-like way,
He invented a new-fangled drug.

—*Jokichi Takamine, Jr.*

By the shores of Cuticura
By the sparkling Pluto Water,
Lived the Prophylactic Chiclet,
Listerine, fair Buick's daughter.
She was loved by Instant Postum,
Son of Camel and Victrola;
Heir apparent to the Moxie,
Of the tribe of Coca-Cola.

Through the Shredded Wheat they wandered;

Through the darkness strolled the lovers,

Lovely little Wrigley Chiclet,
Washed by Fairy, fed by Postum.
No Pyrene can quench the fire,
Nor an Aspirin still the headache,
Of my Prest-O-Lite desire;
Let us marry, little Djer Kiss.

—*Polytechnic Reporter.*



FROM OUR READERS

To the Chemist as Citizen:

A letter to the "From Our Readers" column in the February CHEMIST proposed that societies interested in advancing the profession of chemistry offer constructive suggestions regarding the reorganization of the Government. In this connection the following brief summary of President Roosevelt's reorganization proposals may be of interest:

That there should be additional assistance for the President, in order that he may have at hand, or obtain quickly, information needed as a basis for the decisions he must make.

That three managerial services, relating to all executive departments, should be developed on a

more comprehensive basis and should be responsible directly to the President: Civil Service, for personnel management; Bureau of Budget, for fiscal management; Natural Resources Board, for planning management.

That the present ten executive departments should be increased to twelve, through addition of Social Welfare and Public Works. The Interior Department would be made a Department of Conservation.

That among these twelve departments the President should be authorized: (1) To make redistribution of existing bureaus. (2) To assign to departments all of the recently created agencies which are now responsible directly to the

President — part of the functions of the Social Security Board, for instance, going to the Department of Labor and part to the Social Welfare Department. (3) To relate to departments all of the existing independent commissions performing regulatory functions, such as Interstate Commerce Commission, Federal Trade Commission, Communications Commission, and Maritime Commission. (4) To bring about reorganization within each department after these agencies have been taken in.

That the Comptroller General should be changed into an Auditor General, making an independent post-audit of all fiscal transactions and reporting directly to Congress, with responsibility for accounts and current financial transactions transferred back to the executive branch.

These proposals are described as designed to simplify organization, lighten the work of the President, and to enable the President to be more directly and completely responsible to Congress.

—From a FELLOW of THE AMERICAN INSTITUTE OF CHEMISTS



TO THE AMERICAN INSTITUTE OF CHEMISTS:

Mr. G. W. Stamm, Editor of *Science Digest*, was in the office this morning and was interested in a number of articles which have appeared in THE CHEMIST. As you doubtless know, *Science Digest* is a résumé type of paper in which they give reviews of important scientific articles. . . . The article entitled, "The Chemist in Warfare," by Lonnie Clifton Elmore, A.A.I.C., which appeared in the April

1936, issue of THE CHEMIST is of particular interest at this moment. If an extra copy of this issue is at hand, please send it to Mr. Stamm so that he can review the article.

—C. A. Crowley, F.A.I.C.,
Director of Research
Technical Service Bureau, Inc.
Chicago, Illinois.



TO THE AMERICAN INSTITUTE OF CHEMISTS:

May we have permission to publish a digest of the article on "You Can't Keep a Chemical Secret," by Edward Thomas, appearing in the December, 1936, issue of THE CHEMIST? We shall, of course, give credit to THE CHEMIST as well as to the author of the article.

We want this article for our March issue which will go to press next week and will be on the newsstands February first. . . .

Mr. C. A. Crowley wrote you with regard to our magazine last week and we sent you a copy, which I presume you received.

—G. W. Stamm, Managing Editor
Science Digest, Inc.
Chicago, Ill.



To the Editor:

Congratulations on the issues of THE CHEMIST which I have seen so far. As a new member of the INSTITUTE, I am particularly pleased with the human touch which this magazine gives our profession.

I very much liked Mr. Jerome Alexander's poem, "Scientist's Psalm", in the February issue. It was fine to see such a forthright expression in a personal God by such a prominent chemist.

—Robert S. Barnett, F.A.I.C.

Additional Page for Roster

Anderson, Roy B.

(1936), *Secretary*, Brooklyn Varnish Manufacturing Company, Brooklyn, New York.

Bond, Perry A.

(1936), *Teacher of Chemistry*, State University of Iowa, Iowa City, Ia.

Born, Sidney

(1936), *Director of Petroleum Research*, University of Tulsa, Tulsa, Oklahoma.

Brill, Harvey C.

(1936), *Professor of Chemistry and Head of the Department of Chemistry*, Miami University, Oxford, Ohio.

Burton, Milton

(1936), *Department of Chemistry*, New York University, New York, New York.

Christensen, Leo M.

(1936), *Secretary-treasurer*, The Chemical Foundation of Kansas Company, Atchison, Kansas.

Clark, Friend E.

(1936), *Head of Chemistry Department, Chairman of Graduate Council*, West Virginia University, Morgantown, W. Va.

Cole, Everitt J.

(1936), *Treasurer*, Manufacturers' Varnish Company, Inc., Brooklyn, N. Y.

Copenhaver, James E.

(1936), *Associate Professor of Chemistry*, University of South Carolina, Columbia, South Carolina.

Douglas, Frank W.

(1936), *Professor, Department of Chemistry*, Colorado College, Colorado Springs, Colorado.

Dreyfus, William

(1936), *Director*, Chemical Department, West Disinfecting Company, Long Island City, New York.

Danning, Preston M.

(1936), *Superintendent and Chief Chemist*, Colonial Works, Inc., Brooklyn, N. Y.

Elder, Lucius W.

(1936), *Research Chemist*, General Foods Corporation, Battle Creek, Michigan.

Elm, Adolf C.

(1936), *Research Chemist*, The New Jersey Zinc Company (of Pennsylvania), Palmerton, Pennsylvania.

Everett, Ralph H.

(1936), *Secretary*, Keystone Varnish Company, Brooklyn, N. Y.

Gould, Howard W.

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